

ABSTRACT OF THE DISCLOSURE

A method of using a bipolar junction transistor as a local oscillator in a satellite down converter to
5 eliminate second and third harmonic interference between two local oscillators mainly includes serial connection of a mixer between a low-noise amplifier and an intermediate frequency amplifier in the satellite down converter, and serial connection of a bipolar
10 junction transistor (BJT) to the mixer, so that the satellite down converter may have reduced phase noise and reduced power consumption, and that second and third harmonic interference at the same frequency range is eliminated.